



## MEMORANDUM

**Date:** February 28, 2018

**To:** Jamie Hyslop, USACE Regulatory Branch

**From:** Dan Graham, PE, Permitting and Environmental Manager

**Re:** Compensatory Mitigation Plan – Identified Revisions Planned

---

On Dec 21, 2017, Donlin Gold submitted an updated application to the US Army Corps of Engineers Regulatory Branch (USACE) to approve discharges of fill into waters of the US under the Clean Water Act Section 404 and the Rivers and Harbors Act Section 10 regulations (herein referred to as the DA application). The DA application updates included the following key items:

1. The quantities of wetland acreage and stream length impacts were updated to reflect the current wetlands mapping based on the Preliminary Jurisdiction Determination report (PJD) dated December 2016 that was requested by the Corps as part of the project review. The Corps issued a preliminary determination concurring with the mapping dated February 27, 2017. An addendum was filed in August 2017 to include the mapping for the pipeline North Route option. The Corps issued a preliminary determination concurring with the addendum mapping dated October 12, 2017. The total mapped area covered by the 2 determinations is 107,408.5 acres.
2. Following the submission of comments by the public and agencies on the draft EIS and initial permit application, the pipeline route was adjusted to avoid all co-location with the Iditarod National Historic Trail (INHT). Donlin was able to plan and propose a route (known as the North Route option) in response to the concerns that were raised. In addition, the project plan now includes options for reducing visual impacts at the 4 locations where the pipeline crosses the INHT. The North Route option is now incorporated as the proposed plan in the updated DA application. The overall length of the pipeline did not change materially.
3. The DA application includes a Compensatory Mitigation Plan (CMP) for the updated wetland acreage and stream length impacts. The CMP documents the extensive evaluation that was undertaken first to identify potential mitigation opportunities within the affected watersheds, including both restoration and preservation opportunities. The CMP then documents the expanded search for appropriate mitigation opportunities beyond the affected watersheds, until adequate practicable



mitigation opportunities could be identified to fulfill the values and standards of Alaska's wetland mitigation policy. The CMP presents a mitigation plan that offsets the project impacts based on an acre-to-acre and foot-to-foot basis for wetlands and streams, respectively.

During the course of the initial discussion with and feedback from USACE, EPA and USFWS, Donlin Gold has identified several items within the CMP that merit review and revision. In response, Donlin Gold plans to initiate the following additions or changes to the CMP:

- Crooked Creek – Donlin Gold has described in various formats the adaptive management approach for monitoring and the possible mitigation, if needed, of potential flow changes as well as habitat availability in Crooked Creek. Donlin Gold proposes to prepare a formal Aquatic Resource Monitoring Plan (ARMP) to be referenced in the CMP which will include measure to monitor flow, habitat and biologic health of the system. The State of Alaska will be involved in the development of this plan as it relates to the project's Title 16 Fish Habitat permit and water use authorizations.
- Mitigation for Long Term Temporary Impacts – Donlin Gold will be revising the CMP to address mitigation for long-term (life-of-mine) temporary impacts (823 acres).
- Design and Performance Standards for In-watershed Restoration – Donlin Gold will propose more specific design and performance standards for the proposed restoration of the placer mine workings in the Crooked Creek Watershed under permittee responsible mitigation (PRM). Donlin Gold will specifically revisit the in-watershed restoration plans to ensure that they provide sufficient detail to demonstrate wetland and stream restoration and, where applicable, ecological lift. This will include technical discussions with agency staff on the proposed standards and finalizing the Crooked Creek PRM plan. We will also add more detail regarding restoration plans and potential for ecological lift for material borrow sites and overburden stockpiles.
- Updated watershed assessment – Following the activities listed above, Donlin Gold will add a specific discussion comparing the quality, productivity and values of the wetlands and streams associated with the permanent and long-term impacts caused by the project footprint versus those of the restoration areas in the drainage. This will address the aquatic value of the proposed mitigation and the absence of significant watershed-level degradation of aquatic resources.
- Updated Chuitna PRM Plan – Donlin Gold will revise the off-site mitigation summary to include a comparison of the quality, productivity and values of the wetlands and streams with permanent and long-term impacts imposed by the project footprint versus those of the areas being preserved in the Chuitna drainage.
- Add references to applicable mitigation documents – the text will be revised or amended to identify how the application of the 2008 mitigation rule and the 1994 Alaska Wetlands Initiative are addressed within the proposed mitigation plan.